Food and Agriculture Organization of the United Nations
Land and Water Division

# AQUASTAT

and

# Multiple-use Water Services

by

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MUS Group meeting, Rome, 24 August 2009

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# What is AQUASTAT?

## FAO's global country-level information system on water and agriculture

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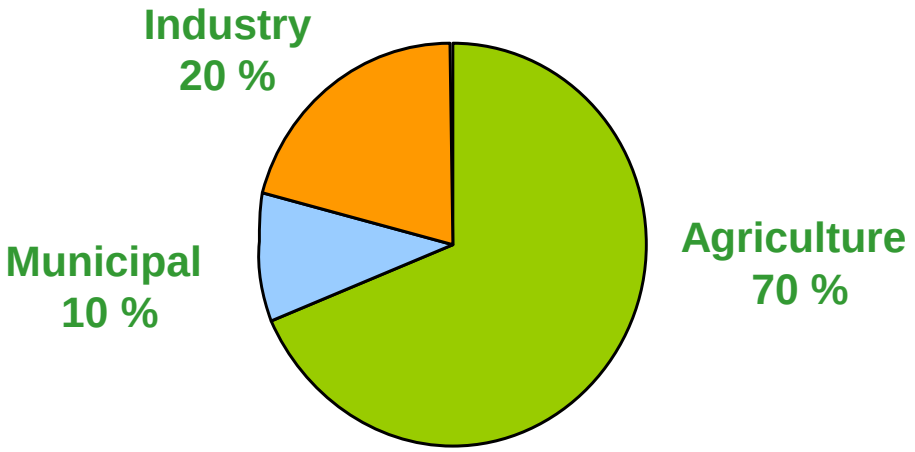
Water withdrawal by sector

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# Some key questions

- Is there **enough water** to feed the world in the near future (water balance, competition with other sectors)?
- What are the **performances** of the irrigation sector? How do they change with time?
- How does irrigation contribute to **food security** and to the achievement of the **MDGs and WSSD targets**?
- What is the **impact** of irrigation on the **environment**?

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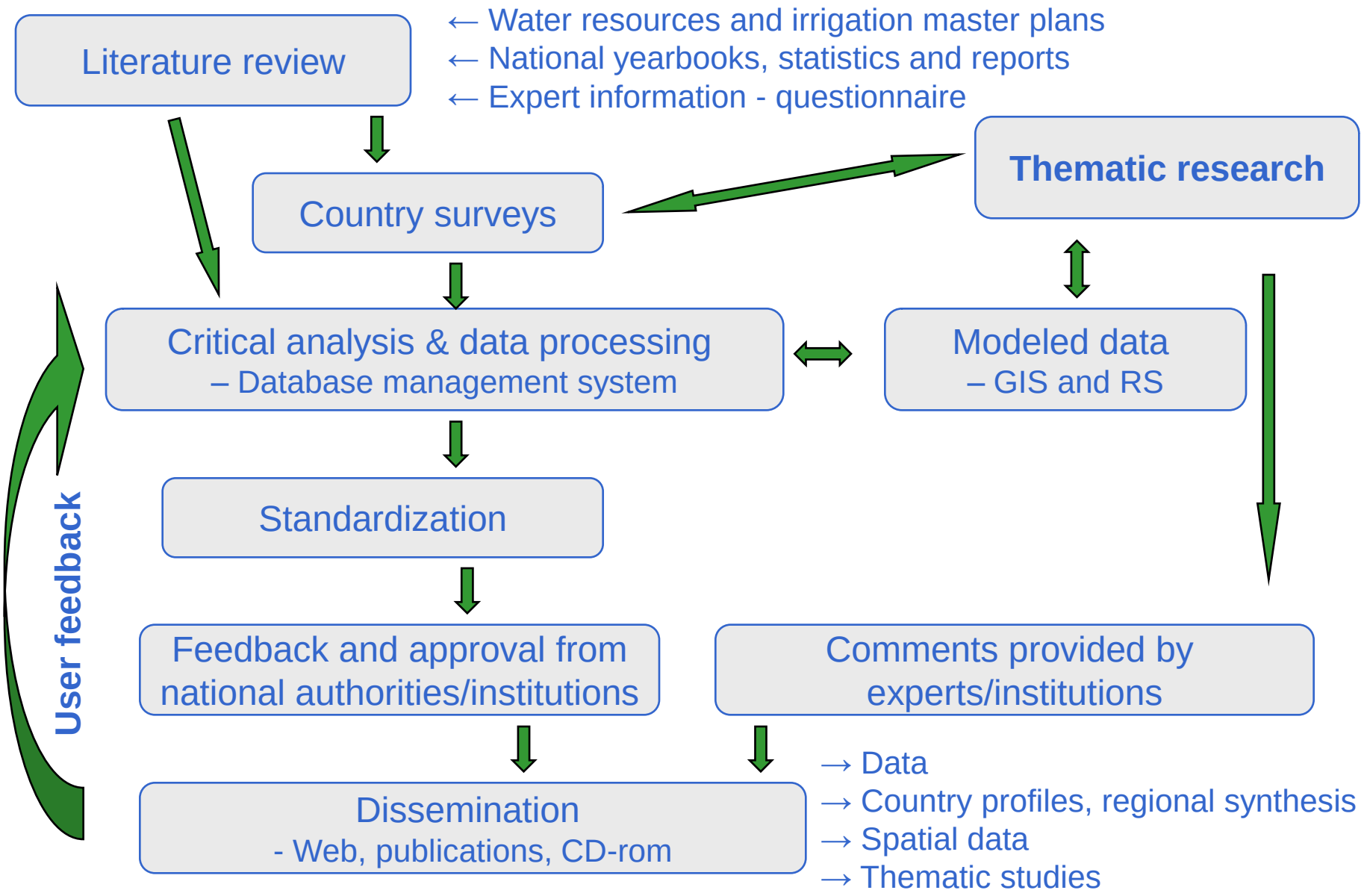
# How information is gathered in AQUASTAT



# AQUASTAT on-line products

A. Database (75 variables)
B. Country profiles (140)
C. Regional overviews (5)
D. Maps and GIS products
E. Water resources
F. Agricultural water use
G. Institutions (300)
H. Glossary (400 terms)
I. Publications (20)

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# The database and the variables

| Category | Number of variables | |
|---|---|---|
| | external | internal |
| Geography et population | 11 | 17 |
| Climate and water resources | 18 | 45 |
| Water use | 20 | 22 |
| Irrigation et drainage | 27 | 47 |
| Environment and health | 4 | 4 |
| **Total** | **80** | **135** |

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# Some challenges

- ✓ Sub-national level information
- ✓ Information by river basin
- ✓ Non-availability or unreliability of data for some major indicators
- ✓ Definitions
- ✓ Data linked to reference
- ✓ Validation of data
- ✓ Ways to update and frequency
- ✓ Time series
- ✓ Information dissemination
- ✓ Sustainability of monitoring process in relation to national monitoring capacities

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# MDGs, water and agriculture

**MDG-1:** Eradicate extreme hunger and poverty

**MDG-7:** Ensure environmental sustainability

**Water in one way or another is linked to all MDGs**

# MDG water indicator 7.5

## Proportion of renewable water resources withdrawn

**AQUASTAT** is responsible to provide the data for this indicator:

- Renewable water resources
- Water withdrawn by **agriculture, municipalities and industries**

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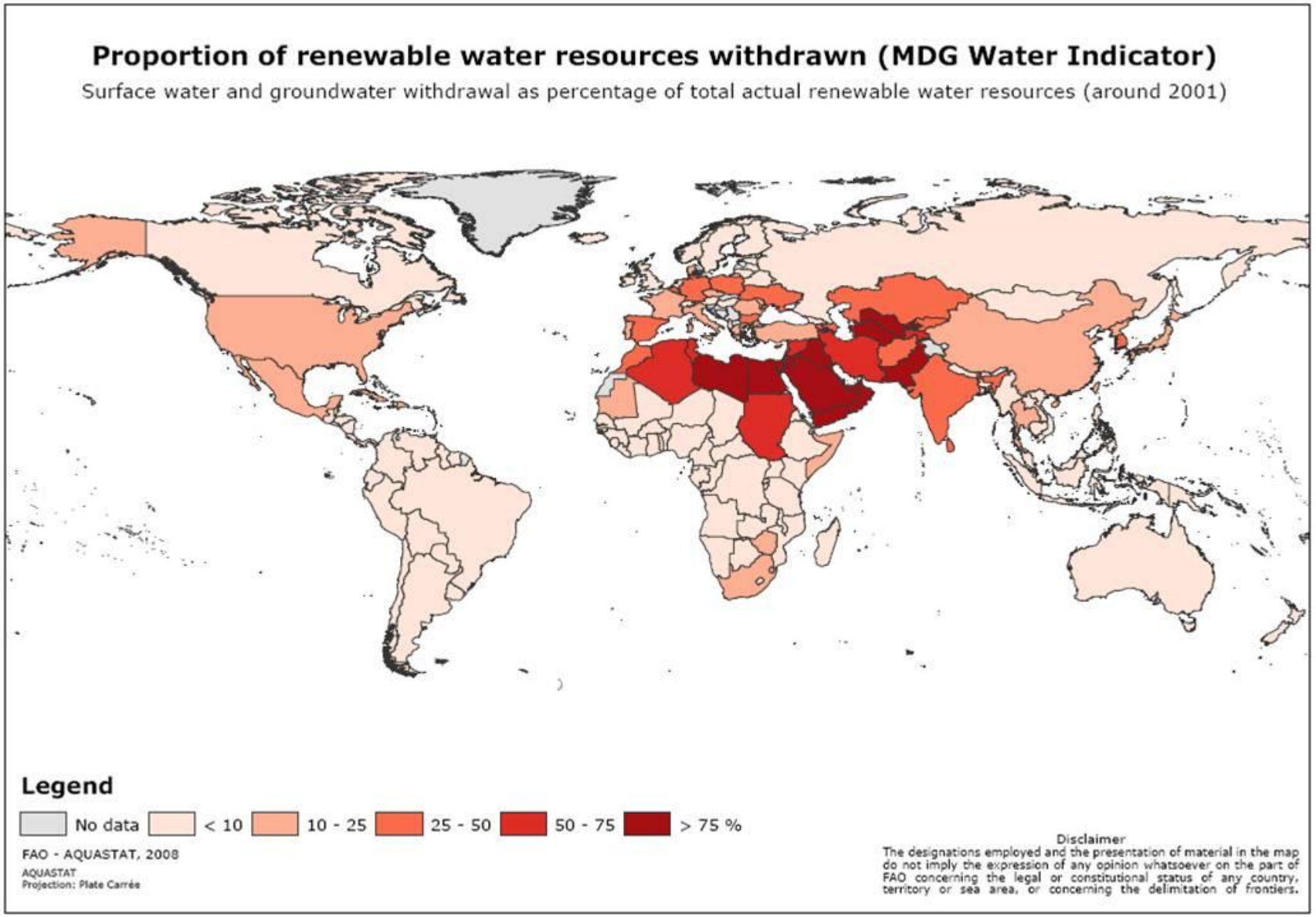


http://www.fao.org/nr/water/aquastat/maps/index.stm

# MUS

- Works within an integrated water resource management (IWRM) framework
- Seeks a comprehensive impact on the multiple dimensions of poverty
- Has a role to play in achieving all eight of the Millennium Development Goals
- Requires an enabling environment for scaling up that promotes inter-sectoral working and participatory planning
- Needs information for its implementation and evaluation

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# Importance of different water withdrawal sectors and role of MUS

- Agricultural water withdrawal represents 70 percent of all water withdrawal at a global level
- Domestic water withdrawal represents 20 percent of all water withdrawal at a global level
- Although domestic water withdrawal is less, ensuring its timely availability is as important for livelihoods
- It is not always clear where rural domestic water withdrawal is put in statistics: agricultural, domestic, or not at all considered.
- MUS could play a role in clarifying this situation, which is important to know with especially in times of increasing water scarcity
- How to deal with irrigation schemes, that do not need irrigation on a continuous basis, how to ensure MUS in that case (for example water might stop flowing in canals, or pumps might be stopped).
- How to translate site specific values into national values, the mandate of AQUASTAT, UN-water and important for global studies.

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# What MUS indicators/variables would be needed to be able to:

- Follow the **progress and performance** of MUS and its **impact** on **livelihoods**
- Follow the **impact** of MUS on **water resources**
- Put MUS in the context of other **poverty alleviation** activities
- Link MUS to **other indicators** (MDG, UN-Water, etc.)?
- Ensure **coherence** with indicators and variables available in information systems such as **AQUASTAT** (definitions, scales, comparability, etc.)
- ...

**But also: what information does MUS need to collect for its implementation?**

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# What MUS indicators could be introduced in AQUASTAT, considering that:

- The AQUASTAT database is a **country-level** database, meaning that national values are required
- AQUASTAT concentrates on **water for agriculture**
- Agricultural and municipal water withdrawal data need both to be **combined and separated**
- The AQUASTAT database contains **quantitative data**, not qualitative (such as yes/no, good/bad, etc.)
- ...

**But also: what (existing or new) information could AQUASTAT provide to MUS needed for its implementation?**

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# Thank you

http://www.fao.org/nr/aquastat

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